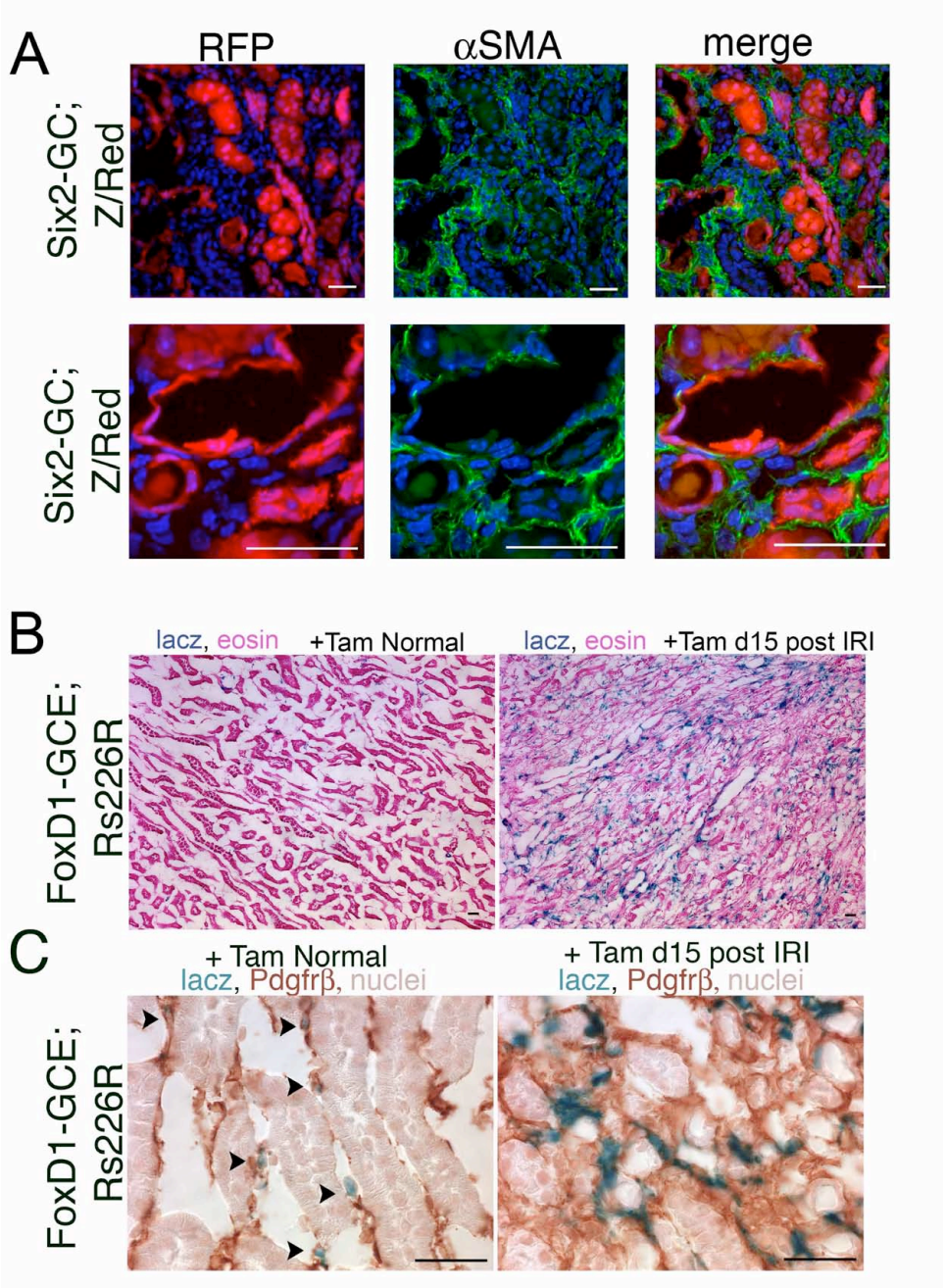

Supplementary Figure 4. Following unilateral ischemia reperfusion injury, interstitial myofibroblasts derive from FoxD1 fated but not Six2 fated kidney mesenchyme. **(A)** Low magnification (upper) and high magnification (lower) confocal images of Six2GC; Z/red mouse kidneys 15d following IRI showing marked expansion of interstitial αSMA+ cells (green) but none co-express the

epithelial fate marker RFP (red) which is clearly visible in all metanephric mesenchyme-derived tubular epithelial cells. **(B)** By contrast FoxD1-GCE; Rs26R adult kidneys pulsed with Tam on E10.5 to label a cohort of pericytes (blue) *in utero*, show marked expansion of LacZ stained cells 15 days following IRI injury due to expansion of the originally stained cells, and **(C)** the LacZ+ blue stained interstitial cells 15d following IRI co-express the marker Pdgfrβ (marker = 50μm), confirming their identity as myofirboblasts.